

ABSTRACT OF THE DISCLOSURE

A liquid crystal display device of a vertical alignment mode is provided in which a quenching pattern, which is generated by such liquid crystal molecules whose in-plane component of the alignment directions under applied voltage is aligned along the cross nicole directions, is unrecognizable for a user. In the liquid crystal display device of a vertical alignment mode, a liquid crystal layer is has a defined value of d/p between $0.0021 \times (V_{\max})^2 - 0.0458 \times (V_{\max}) + 0.65$ and $0.0021 \times (V_{\max})^2 - 0.0458 \times (V_{\max}) + 0.50$, and a defined value of $d \cdot \Delta n / \lambda$ between $-0.00026 \times (V_{\max})^3 + 0.016 \times (V_{\max})^2 - 0.2281 \times (V_{\max}) + 2.124$ and $-0.00026 \times (V_{\max})^3 + 0.016 \times (V_{\max})^2 - 0.2281 \times (V_{\max}) + 1.7603$, where V_{\max} [V] is the maximum applied effective voltage applied to the liquid crystal layer.